

Amendments to the Specification:

Please amend the paragraph (section) beginning on page 6, at line 3, as shown below:

The present invention provides, a local network router that learns to route IP traffic among customer premises equipment on a local network rather than permitting the IP traffic to be routed through a broadband cable network and selected internet service provider (ISP) to the internet. The local network router dynamically generates a routing table from address resolution protocol (ARP) packets exchanged between the CPE and the external network. The table includes, for example, MAC addresses and IP addresses for each CPE on the local network. For each IP data packet received from a CPE that is destined for another local CPE, the local network router replaces a default gateway address with an IP address corresponding with the destination CPE. Accordingly, network resources for routing traffic are significantly reduced.

Please amend the paragraph (section) beginning on page 8, at line 10, as shown below:

In one preferred embodiment, the router additionally comprises first and second interfaces coupled with the controller. The first and second interfaces provide Ethernet connectivity with networks external to said router. The first interface is coupled to said internal network, and the second interface is coupled to said cable modem for communicating with the external network. For example, the first router interface is a local area network (LAN) interface, and the second router interface is a wide-area network (WAN) interface.

Please amend the paragraph (section) beginning on page 13, at line 32, as shown below:

In step 408, the sender's MAC address and sender's IP address are stored in a routing table of the router for each CPE. In step 410, the IP addresses are verified in the

routing table, preferably on a regular basis such as every 5 minutes. The periodic verification of the IP addresses could occur on any suitable basis, with 5 minutes, being one example. In this way, the disconnection of an IP device is detected at the next verification, the length of period being a design choice as understood by one of ordinary skill in the art. Step 410 may be performed by sending a “ping” to each CPE to verify that the CPE are still operating, or by sending an ARP type packet requesting the CPE to verify it’s IP address.